IN THE CLAIMS:

1. (Amended) An antibody, or fragment thereof, wherein:
the antibody, or fragment thereof, binds to an epitope under first conditions;
the bond of the antibody, or fragment thereof, to the epitope is broken under second conditions;
wherein both the first conditions and the second conditions lie within physiologically acceptable limits of a human or an animal body.

2. (Twice amended) The antibody, or fragment thereof, of claim 1 wherein the antibody, or fragment thereof, is coupled to a diagnostically, therapeutically or cosmetically active substance.

3. (Twice amended) The antibody, or fragment thereof, of claim 1, wherein the first conditions and the second conditions are dependent upon pH.

4. (Amended) The antibody, or fragment thereof, of claim 3, wherein the physiologically acceptable limits are a pH of between about 4 and about 8.5.

5. (Amended) The antibody, or fragment thereof, of claim 3, wherein:
the first conditions are at a pH within a range of between about 4 and about 7 or another range of between about 7 and about 8.5; and
the second conditions are at a pH of about 7.

6. (Amended) The antibody, or fragment thereof, of claim 3, wherein:
the first conditions are at a pH of about 7; and
the second conditions are at a pH within a range of between about 4 and about 7 or another range of between about 7 and about 8.5.

7. (Amended) The antibody, or fragment thereof, of claim 3, wherein:
the first conditions are at a pH within a range of between about 4 and about 6 or another range of between about 8 and about 8.5; and
the second conditions are at a pH of between about 6 and about 8.

8. (Amended) The antibody, or fragment thereof, of claim 3, wherein:
the first conditions are at a pH of between about 6 and about 8; and
the second conditions are at a pH within a range of between about 4 and about 6 or another range of between about 8 and about 8.5.

9. (Twice amended) The antibody, or fragment thereof, of claim 1, wherein the first conditions and the second conditions are dependent upon ion strength or pH.

10. (Amended) The antibody, or fragment thereof, of claim 9, wherein:
the first conditions are a first ion strength within a range of between about 0 M and about 13 M; and
the second conditions are a second ion strength within the range of between about 0 M and about 13 M.

11. (Amended) The antibody, or fragment thereof, of claim 9, wherein:
the first conditions are at an ion strength within a range of between about 0 mM and about 500 mM; and
the second conditions are at an ion strength within a range of between about 1 M and about 13 M.

12. (Amended) The antibody, or fragment thereof, of claim 9, wherein:
the first conditions are a first pH within a range of between about 4 and about 8.5, a first ion strength within a range of between about 0 M and about 13 M, or a combination thereof; and
the second conditions are a second pH within the range of between about 4 and about 8.5, a second ion strength within the range of between about 0 M and about 13 M, or a combination thereof.

13. (Twice amended) The antibody, or fragment thereof, of claim 1, wherein the antibody, or fragment thereof, is selected from a group consisting of a F(ab), F(ab)', $F(ab)'_2$ and an scFv.

14. (Twice amended) The antibody, or fragment thereof, of claim 1, wherein said antibody, or fragment thereof, is capable of use in a targeted or temporary diagnostic, therapeutic and cosmetic treatment of externally accessible parts of the human or the animal body.

15. (Amended) The antibody, or fragment thereof, of claim 14, wherein said targeted or temporary diagnostic, therapeutic or cosmetic treatment comprises a treatment of an oral cavity of the human or the animal body.

18. (Amended) The antibody, or fragment thereof, of claim 15, wherein said antibody, or fragment thereof, is capable of removing plaque in said oral cavity.

19. (Amended) The antibody, or fragment thereof, of claim 14, wherein said targeted or temporary diagnostic, therapeutic or cosmetic treatment comprises a treatment for fighting infections in externally accessible parts of the human or the animal body.

21. (Amended) The antibody, or fragment thereof, of claim 20, wherein the enzyme is selected from the group consisting of an oxidase, a peroxidase, a protease, a cell-wall lysing enzyme and a plaque matrix inhibitor.

22. (Amended) The antibody, or fragment thereof, of claim 21, wherein the enzyme comprises an oxidase selected from the group consisting of glucose oxidase, lactase oxidase and uric acid oxidase.

24. (Amended) The antibody, or fragment thereof, of claim 21, wherein the enzyme comprises the protease and is selected from the group consisting of papain, pepsin, trypsin, ficin and bromelin.

29. (Amended) The antibody, or fragment thereof, of claim 28, wherein said pathogenic micro-organism is selected from the group consisting of Actinomyces actinomycetem comitans, Porphyromonas gingivalis, Prevotella intermedia, Streptococcus mutans, Bacteroides forsythus, Eikenella corrodens, Treponema denticola, Campylobacter lectus, and Fusobacterium nucleatum.

30. (Twice amended) A composition comprising:
at least one antibody, or fragment thereof, of claim 1; and
at least one physiologically acceptable diluent, solvent or carrier.

31. (Twice amended) The composition of claim 30, wherein the composition is selected from the group consisting of a teeth cleaning agent, mouthwash, mouth spray, chewing tablet, chewing gum, cream and ointment.

Please add the following new claims:

33. (New) The antibody, or fragment thereof, of claim 12, wherein the first pH is about 7.4 and the second pH is about 4.5.

34. (New) The antibody, or fragment thereof, of claim 12, wherein the first pH is about 7.4, the second pH is about 4.5 and the second ion strength is about 1 M NaCl.

35. (New) The antibody, or fragment thereof, of claim 12, wherein the first pH is about 8.5, the first ion strength is about 1 M NaCl and the second ion strength is about 0 M.

36. (New) The antibody, or fragment thereof, of claim 12, wherein the first pH is about 8.5, the second pH is about 4.5 and the second ion strength is about 1 M NaCl.

37. (New) The antibody, or fragment thereof, of claim 1, wherein the epitope is of a Staphylococcus epidermidis origin.

38. (New) A composition comprising:
a binding means for binding an epitope under first conditions;
wherein the bond between the binding means and the epitope is broken under second conditions;
wherein the first conditions and the second conditions lie within physiologically acceptable limits of a human or an animal body.

39. (New) The composition of claim 38, wherein the epitope is of a Staphylococcus epidermidis origin.